

What is claimed is:

1. A packaging machine comprising:
a cylindrical chute;
5 means for bending an elongated bag-making film into a tubular form
around said chute by mutually overlapping side edges of said film;
a heater unit for longitudinally sealing said mutually overlapping side
edges of said film;
heater driving means for moving said heater unit between a sealing
10 position at which said heater unit contacts said film and a retracted position at
which said heater unit is separated from said chute; and
an air cylinder for controlling compressive force with which said heater
unit at said sealing position compresses said film against said chute by having air
of a specified pressure supplied thereto.
2. The packaging machine of claim 1 further comprising pressure
regulating means for regulating air pressure supplied to said air cylinder to a
specified pressure level and a controller for controllably varying said specified
pressure level.
3. The packaging machine of claim 1 wherein said heater driving
means includes another air cylinder.
4. The packaging machine of claim 1 further comprising a support
unit which supports said heater unit and is slidable towards and away from said
chute, said heater driving means operating to move said heater unit between said
sealing position and said retracted position by moving said support unit, said air
5 cylinder acting only on said heater unit to control said compressive force.

5. The packaging machine of claim 4 further comprising support unit moving means for moving said support unit between a work area which includes both said sealing position and said retracted position and a non-working area which is farther away from said chute than said work area.

6. A packaging machine comprising:

a cylindrical chute;

means for bending an elongated bag-making film into a tubular form around said chute by mutually overlapping side edges of said film;

5 a heater unit for longitudinally sealing said mutually overlapping side edges of said film;

an air cylinder both for moving said heater unit between a sealing position at which said heater unit contacts said film and a retracted position at which said heater unit is separated from said chute and for controlling compressive force
10 with which said heater unit at said sealing position compresses said film against said chute;

air-pressure generating means for generating from a single air source having an initial air pressure both a higher air pressure for moving said heater unit and a lower air pressure, lower than said higher air pressure, for controlling said
15 compressive force; and

switching means for supplying to said air cylinder selectively either said higher pressure to thereby move said heater unit with respect to said film or said lower pressure to thereby control said compressive force.

7. The packaging machine of claim 6 further comprising control means for serving to additionally supply said higher pressure to said air cylinder for a specified length of time while said lower pressure is being supplied to said air cylinder by said switching means.

8. The packaging machine of claim 6 wherein said air-pressure generating means includes a higher air-pressure generating means for generating said higher air pressure from said single air source and a lower air-pressure generating means for generating said lower air pressure from said single air source, and wherein said switching means serves to supply said higher pressure generated by said higher air-pressure generating means to said air cylinder when said heater unit is moved with respect to said chute and to supply said lower pressure generated by said lower air-pressure generating means to said air cylinder when said compressive force is controlled.

9. The packaging machine of claim 8 further comprising control means for serving to additionally supply said higher pressure to said air cylinder for a specified length of time while said lower pressure is being supplied to said air cylinder by said switching means.

10. The packaging machine of claim 8 wherein said air cylinder has a first chamber and a second chamber, and wherein said switching means serves to supply said high pressure to said first chamber to thereby move said heater unit to said retracted position, to supply said high pressure to said second chamber to thereby move said heater unit to said sealing position, and to supply said low pressure to said second chamber to thereby control said compressive force.

11. The packaging machine of claim 10 further comprising control means for serving to additionally supply said higher pressure to said second chamber for a specified length of time while said lower pressure is being supplied to said second chamber by said switching means.

12. The packaging machine of claim 6 further comprising means for controllably varying said lower pressure while said lower pressure is being supplied to said air cylinder.

13. The packaging machine of claim 7 further comprising means for controllingly varying said lower pressure while said lower pressure is being supplied to said air cylinder.

14. The packaging machine of claim 8 further comprising means for controllingly varying said lower pressure while said lower pressure is being supplied to said air cylinder.

15. The packaging machine of claim 9 further comprising means for controllingly varying said lower pressure while said lower pressure is being supplied to said air cylinder.

16. The packaging machine of claim 10 further comprising means for controllingly varying said lower pressure while said lower pressure is being supplied to said air cylinder.

17. The packaging machine of claim 11 further comprising means for controllingly varying said lower pressure while said lower pressure is being supplied to said air cylinder.